IN THE CLAIMS

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1. (original) A device, which comprises a surface layer that has incorporated therein at least one radioactive nuclide.

2. (original) A device which comprises a substrate and a self-assembled layer that has incorporated therein at least one radioactive nuclide.

3. (original) A device according to claim 2, wherein the substrate is selected from the group consisting of stainless steel, Nitinol, silicon, quartz, cobalt chrome and polymers.

4. (currently amended) A device according to claim ~~1~~2, wherein the self-assembled layer is an anchored SAM.

5. (currently amended) A device according to claim ~~2~~4, wherein the anchored SAM is selected from the group consisting of monolayers or films anchored by siloxane, thiol, amine ~~or~~ and phosphonate.

6. (original) A device according to claim 1, comprising a substrate of a metal selected from the group consisting of stainless steel and Nitinol and a self-assembled layer anchored by phosphonate.

7. (original) A device according to claim 1, wherein the surface layer is formed of a radioactive material.

8. (original) A device according to claim 1, wherein the surface layer is formed of a radioactive material that has been activated to induce radioactivity therein after its final formation.

9. (original) A device according to claim 1, which comprises a chemically functionalized SAM incorporating radionuclides attached at the surface of the device.

10. (original) A device comprising a substrate covered on all its surfaces by a self-assembled layer, which layer

includes radioactive nuclides, and having no other protective layer or coating over said self-assembled layer.

11. (original) A temporary or permanent therapeutic implant, comprising a substrate and a radioactive self-assembled surface layer.

12. (original) An implant according to claim 11, wherein the self-assembled surface layer is an anchored SAM.

13. (original) A device according to claim 11, which is a stent for use in angioplasty.

14. (original) A device according to claim 11, wherein the surface layer has a thickness of less than 10 nm.

15. (original) A device according to claim 11, wherein the substrate is made of Nitinol.

16. (original) A device which comprises a substrate and a self-assembled layer that has incorporated therein at least one radioactive nuclide, wherein the nuclide is selected from the group consisting of I-131, F-18, C-11, Br-83, Br-82 and Cu-64.

17. (withdrawn).

18. (withdrawn).

19. (withdrawn).

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22. (withdrawn).

23. (withdrawn).

24. (withdrawn).

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27. (withdrawn).

28. (withdrawn).

29 (withdrawn).

30. (withdrawn).

31. (withdrawn).
32. (withdrawn).
33. (withdrawn).
34. (withdrawn).
35. (withdrawn).